

ABSTRACT OF THE DISCLOSURE

Methods, systems and devices are described for a direct-sequence spread-spectrum communication scheme that increases the number of users by utilizing a plurality of closely spaced orthogonal carriers that produce overlapping spectra. A method includes overlapping a plurality of direct-sequence spread-spectrum signals using carrier frequencies that are orthogonally spaced relative to a bit rate. The methods, systems and devices provide advantages because they can accommodate an increase in the number of normalized users and can optimize the loading of users across multiple frequency channels.